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STENNIS SPACE CENTER

NASA/Stennis Space Center Learjet 23 Fact Sheet

Thirty years ago, the prototype of the Learjet Model 23 took to the air and aviation history was made. And nearly 15 years ago, NASA's John C. Stennis Space Center in South Mississippi acquired one of the first models of these jets. There were only about 100 built and are only about 30 still in use.

The primary function of Stennis Space Center's Learjet is to perform remote sensing and Earth observations- The aircraft is equipped with a multispectral scanner and a Zeiss nine-inch serial mapping camera. There are also three scanners that can be installed in the aircraft depending on the mission requirements. The jet has performed more than 600 data acquisition missions and has also been used in the research and development of new remote sensing devices and applications of imagery data.

SSC's Learjet has been utilized extensively, including a mission to Russia. The plane was involved in a joint project between the United States and Russia to study Russia's Kamchatkan volcanoes' geologic evolution, the impact of large volcanic eruptions on the atmosphere and its chemistry, and to model thermal and dynamical aspects of volcanoes.

In the summer of 1993, the Midwest was devastated by flooding. At the request of the Federal Emergency Management Agency (FEMA), personnel from Stennis flew the Learjet equipped with sensors over portions of the midwestern states. FEMA used the infrared images to assist in charting flood-damaged areas, to boost the emergency management agency's computer database on the region and to update flood insurance maps. Stennis Space Center's imagery also helped FEMA determine who was in greatest need of disaster relief, to get it to them more quickly and to settle flood insurance claims more efficiently. This Midwest mission also helped serve as training for a Russian pilot who co-piloted the expedition.

In 1992, Stennis Space Center provided digital imagery and infrared photography of the areas of South Florida hardest hit by Hurricane Andrew. In this particular situation, the imagery helped state officials assess damage, prioritize relief efforts and develop long-term land use plans.

And, in 1987, Stennis Space Center used the Learjet to provide remotely sensed data of the Northern California forest fires.

The Learjet supports many other scientific and commercial projects. These include environmental monitoring, land use assessment, archaeology and preservation of historical sites.

While NASA does have three other Learjets--one at Ames Research Center, Mountain View, Calif.; one at Langley Research Center, Hampton, Va.; and one at Lewis Research Center, Cleveland, Ohio--Stennis Space Center has the only one configured to perform year-round remote sensing and Earth observations. The aircraft flies about 200 hours a year.

Stennis Space Center's Learjet received considerable attention when the company--founded by Bill Lear--celebrated its 30th anniversary. It was displayed on a 30th anniversary poster and on the cover of Airplane Owners and Plane Association magazine.

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